

**In the Specification:**

Please amend the specification as shown:

Please delete paragraph [00090] and replace it with the following paragraph:

[00090] FIGURE 13 presents a map of representative probes, primers, and tether oligonucleotides for binary immuno-SDA (see SEQ ID NOS 19, 6, 10, 11, 9, 1 and 18, respectively, in order of appearance).

Please delete paragraph [000154] and replace it with the following paragraph:

**[000154] RHP-1** (right hand probe; sequence in **bold** is common with primer SRH-1, below):

5' CCA GTC TTG TCT TGT CTG TTC **TCG GGA TGC ATT CAG TGA CGT GAT**  
GAG CTA GAC AGA TGT ACA GT (SEQ ID NO: 1)

Please delete paragraph [00155] and replace it with the following paragraph:

**[000155] RHP-3** (right hand probe; sequence in **bold** is common with primer SRH-1, below):

5' CCA GTC TTG TCT TGT CTG TTC **TCG GGA TGC ATT CAG TGA CGT GAT**  
GAG CTA GAC AGA TGT AC (SEQ ID NO: 2)

Please delete paragraph [00156] and replace it with the following paragraph:

**[000156] RBD-3v3** (right hand probe; X = biotin-labeled dT; sequence in **bold** is common with primer SRH-1, below):

5' CCA GTC TTG TCT TGT CTG TTC **TCG GGA TGC ATT CAG TGA CGT GAT**  
GAG CTA GAC AGA TGT AC TTT TXT **(SEQ ID NO: 3)**

Please delete paragraph [00157] and replace it with the following paragraph:

**[000157] LHP-1** (left hand probe; underlined bases are complementary with the 3' end of RHP-1):

5' ATT CAC GCT TCC ATT CCA TGT CTC GGG TTT ACT TCA TCT GCA ACT  
GTA C **(SEQ ID NO: 4)**

Please delete paragraph [00158] and replace it with the following paragraph:

**[000158] LHP-2** (left hand probe; underlined bases are complementary with the 3' end of RHP-1):

5' ATT CAC GCT TCC ATT CCA TGT CTC GGG TTT ACT TCA TCT GCA ACT  
GTA CAT **(SEQ ID NO: 5)**

Please delete paragraph [00159] and replace it with the following paragraph:

**[000159] LHP-3** (left hand probe; underlined bases are complementary with the 3' end of RHP-1):

5' ATT CAC GCT TCC ATT CCA TGT CTC GGG TTT ACT TCA TCT GCA ACT  
GTA CAT CTG T **(SEQ ID NO: 6)**

Please delete paragraph [00160] and replace it with the following paragraph:

**[000160] LHP-4** (left hand probe; underlined bases are complementary with the 3' end of RHP-1):

5' ATT CAC GCT TCC ATT CCA TGT CTC GGG TTT ACT TCA TCT GCA ACT  
GTA CAT CTG TCT **(SEQ ID NO: 7)**

Please delete paragraph [00161] and replace it with the following paragraph:

**[000161] LHP-5** (left hand probe; underlined bases are complementary with the 3' end of RHP-1):

5' ATT CAC GCT TCC ATT CCA TGT CTC GGG TTT ACT TCA TCT GCA ACT  
GTA CAT CT **(SEQ ID NO: 8)**

Please delete paragraph [00162] and replace it with the following paragraph:

**Primers**

**[000162] SRH-1** (right-hand primer; sequence in **bold** is common with RHP-1):

5' CGA TTC AGC TGC AGA CGA TCT **CGG GAT GCA TTC AGT GAC** ) **(SEQ ID NO: 9)**

Please delete paragraph [00163] and replace it with the following paragraph:

**[000163] SLH-2** (left-hand primer; sequence in **bold** is common with LHP-1, 2, 3, 4 and 5; underlined bases are complementarity with the 3' end of RHP-1):

5' ACC GCA TCG AAT GAC TGT CTC **GGG TTT ACT TCA TCT GCA AC**  
**(SEQ ID NO: 10)**

Please delete paragraph [00164] and replace it with the following paragraph:

**Adapters**

**[000164] ADR-2** (underlined bases are identical to the 3' end of TBD10.2 [D/R]):

5' ACG TTA GCC ACC ATA CGG ATA GTG ACG TGA TGA GCT AGA C  
**(SEQ ID NO: 11)**

Please delete paragraph [00165] and replace it with the following paragraph:

**[000165] ADR-5** (underlined bases are identical to the 3' end of TBD10.2 [D/R]):

5' ACG TTA GCC ACC ATA CGG ATG ATG AGC TAG AC  
**(SEQ ID NO: 12)**

Please delete paragraph [00166] and replace it with the following paragraph:

**[000166] ADR-8** (underlined bases are identical to the 3' end of TBD10.2 [D/R]):

5' ACG TTA GCC ACC ATA CGG ATG TGA CGT GAT GAG C  
**(SEQ ID NO: 13)**

Please delete paragraph [00167] and replace it with the following paragraph:

**[000167] ADIQS-1 (IQS adapter):**

5' ACG TTA GCC ACC ATA CGG ATG ATG AGC ATC TG **(SEQ ID NO: 14)**

Please delete paragraph [00168] and replace it with the following paragraph:

**[000168] ADQS-2 (adapter for IQS-2; underlined bases are identical to 3' end of altD6.9(F/D)):**

5' AGC TAT CCG CCA TAA GCC AT AC TCA GAG TGA TCA AGT  
**(SEQ ID NO: 15)**

Please delete paragraph [00169] and replace it with the following paragraph:

**Reporters**

**[000169] TBD10.2 (D/R) (underlined bases are identical to the 5' end of ADR-2 and ADR-5):**

5' (dabcyl)-TAG CGC CCG AGC GCT ACG TT(rox)A GCC ACC ATA CGG AT  
**(SEQ ID NO: 16)**

Please delete paragraph [00170] and replace it with the following paragraph:

**[000170] altD6.9 (F/D):**

5' (fam)-AGT TGC CCC GAG GCA ACT(dabcyl) AGC TAT CCG CCA TAA GCC AT  
**(SEQ ID NO: 17)**

Please delete paragraph [00171] and replace it with the following paragraph:

**Tether Oligonucleotides**

**[000171] RCP-1** (tether oligonucleotide; UPPER CASE bases are complementary to the 5' end of RHP-1):

5' CCG AGA ACA GAC AAG ACA AGA CTG Gat at **(SEQ ID NO: 18)**

Please delete paragraph [00172] and replace it with the following paragraph:

**[000172] LCP-2** (tether oligonucleotide; UPPER CASE bases are complementary to the 5' end of LHP 1-5):

5' CGA GAC ATG GAA TGG AAG CGT GAA Ttt tt **(SEQ ID NO: 19)**

Please delete paragraph [00173] and replace it with the following paragraph:

**[000173] LCP-4** (tether oligonucleotide; UPPER CASE bases are complementary to the 5' end of LHP 1-5):

5' t tta ttt tat CGA GAC ATG GAA TGG AAG CGT GAA T **(SEQ ID NO: 20)**

Please delete paragraph [00174] and replace it with the following paragraph:

**Capture and Displacement Oligos**

**[000174] RCP-13v1** (capture oligonucleotide; UPPER CASE bases are complementary to a sequence near the 5' end of RHP-3; underlined bases are complementary to DO-13v1; X = tetra-ethylene glycol; Z = hexa-ethylene glycol; X is linked to Z through a phosphodiester moiety; and Z is linked to the 5' end of the oligonucleotide through a phosphodiester moiety):

5' biotin-X-Z-cct ggt acg agt ttc tat cct AA TGC ATC aCG AGA ACA GAC AAG ACA  
AG t **(SEQ ID NO: 21)**

Please delete paragraph [00175] and replace it with the following paragraph:

**[000175] DO-13v1** (displacement oligonucleotide [cap] = 3' deoxyruidine):

5' CTT GTC TTG TCT GTT CTC GTG ATG CAT TAG GAT AGA AAC TCG TAC  
CAG G-[cap] 3' **(SEQ ID NO: 22)**

Please delete paragraph [00176] and replace it with the following paragraph:

**[000176] RCP-9v2.2** (capture oligonucleotide; UPPERCASE bases are complementary to bases near the 5' end of RHP-3; underlined bases are complementary to displacement oligo CMPR-9v2; X = tetra-ethylene glycol; Z = hexa-ethylene glycol; X is linked to Z through a phosphodiester moiety; and Z is linked to the 5' end of the oligonucleotide through a phosphodiester moiety):

5' biotin-X-Z-t tta CAC TGA ATG CAT tCC tAG AAC AGA CAA GAC AAG ACT ccg  
tgg cAg cgt **(SEQ ID NO: 23)**

Please delete paragraph [00177] and replace it with the following paragraph:

**[000177] CMPR-9v2** (capture oligonucleotide; UPPER CASE bases are complementary to the 5' end of RHP-3; [cap] = 3' deoxyuridine):

5' ACG CTG CCA CGG AGT CTT GTC TTG TCT GTT CTt GGA ATG CAT TCA  
GT-[cap] 3' **(SEQ ID NO: 24)**

Please delete paragraph [00178] and replace it with the following paragraph:



**Blocking Oligonucleotides** ([cap] = 2', 3' dideoxycytidine)

**[000178] LBK-1** (UPPERCASE bases are complementary to 3' end of LHP-3):

5' ACA GAT GTA CAG Taa ttt-[cap] 3' **(SEQ ID NO: 25)**

Please delete paragraph [00179] and replace it with the following paragraph:

**[000179] RDB-3p5** (UPPER CASE bases are complementary to 3' end of RHP-1;

underlined bases are complementary to 3' end of RHP-3):

5' cag ttc agc acA CTG TAC ATC TGT CTA GC aa-[cap] 3' **(SEQ ID NO: 26)**

Please delete paragraph [00180] and replace it with the following paragraph:

**[000180] RDB-3p8** (UPPER CASE bases are complementary to 3' end of RHP-1;

underlined bases are complementary to 3' end of RHP-3):

5' cag ttc agc acA CTG TAC ATC TGT CTA GCT CA aa-[cap] 3'  
**(SEQ ID NO: 27)**

Please delete paragraph [00181] and replace it with the following paragraph:

**[000181] RDB-3p10** (UPPER CASE bases are complementary to 3' end of RHP-1;

underlined bases are complementary to 3' end of **RHP-3**):

5' cag ttc agc acA CTG TAC ATC TG T CTA GCT CAT Cta-[cap] 3'  
**(SEQ ID NO: 28)**

Please delete paragraph [00182] and replace it with the following paragraph:

**[000182] RDB-3z8** (UPPER CASE bases are complementary to 3' end of RHP-3):

5' cag ttc agc ac aa GTA CAT CTG TCT AGC TCA aac-[cap] 3'

**(SEQ ID NO: 29)**

Please delete paragraph [00183] and replace it with the following paragraph:

**[000183] RDB-3z0** (UPPER CASE bases are complementary to 3' end of RHP-3):

5' cag ttc agc ac aa GTA CAT CTG T aac-[cap]3' **(SEQ ID NO: 30)**

Please delete paragraph [00184] and replace it with the following paragraph:

**Quantification Standards and Quality Control ("QC") Nucleotides**

**[000184] LTAR-1** (QC oligonucleotide from Epoch Biosciences (Bothell, WA); underlined

bases differ from IQS-1):

5' TTT TAC TTC ATC TGC AAC TGT ACA TCT GTC TAG CTC ATC ACG TCA  
CTG AAT GCA T **(SEQ ID NO: 31)**

Please delete paragraph [00185] and replace it with the following paragraph:

**[000185] IQS-1** (internal quantification standard; underlined bases differ from LTAR-1):

5' TT TAC TTC ATC TGC AAC ACA TGA TCT CAG ATG CTC ATC ACG TCA CTG  
AAT GCA TC **(SEQ ID NO: 32)**

Please delete paragraph [00186] and replace it with the following paragraph:

**[000186] IQS-2** (internal quantification standard; lower case bases differ from target-derived amplicon):

5' TTA CTT CAT CTG CAA C at ctg tca ctt gat cac tct ga G TCA CTG AAT GCA TC

**(SEQ ID NO: 33)**